



Strengthening STD Prevention and Control for Health Departments

Technical Assistance Note # 11a | Gonorrhea treatment assurance

From Strategy Area III: Promote CDC-Recommended Screening, Diagnosis, and Treatment

11. Promote CDC-recommended treatment for gonorrhea and syphilis
 - a. Assess GC treatment practices to identify and prioritize providers, organizations, and areas to target for promotion and improvement. Provide education and technical assistance to providers and organizations who prescribe non-recommended treatment for gonorrhea

Why DSTDP included these strategies

Gonorrhea is the second-most commonly reported communicable disease in the United States, and rates of reported cases have been increasing. Increasing burden of disease affects communities in multiple ways and is often a reflection of overall sexual health. Because of the continued emergence of *Neisseria gonorrhoea* antibiotic resistance to the drugs used for gonorrhea treatment and a dwindling antibiotic development pipeline, only a single treatment regimen (dual therapy with injectable ceftriaxone and oral azithromycin) is currently recommended. The risk of emerging resistance to these drugs threatens to undermine public health prevention and control efforts.

Compliance with treatment guidance is important to ensure effective therapy and may slow the emergence or spread of antimicrobial-resistant gonorrhea. State and local health departments are uniquely positioned to monitor the use of recommended treatment and to help ensure that all providers have the information and support they need to treat their patients in accordance with CDC guidelines. Such efforts help ensure that all patients are adequately treated in a timely manner, reducing both the spread of disease and the long-term individual and community-level health consequences of untreated or repeated infections.

Key definitions

“CDC-recommended treatment”: CDC’s Treatment Guidelines are specific with respect to classes of antibiotics and specific dosages recommended for specific infections. CDC’s 2015 STD Treatment Guidelines recommend dual treatment with ceftriaxone (250 mg IM) and azithromycin (1 g orally) for treating uncomplicated gonococcal infections. These recommendations are periodically revised and updated based on the best available evidence of clinical efficacy, patterns of reduced susceptibility, basic science, diagnostics, and clinical care. Treatment recommendations are intended to guide clinical practice and provide an additional tool to inform provider decisions regarding the best treatments for their patients.

Considerations for implementation

Assess GC treatment practices to identify and target promotion efforts

- Assess the quality, completeness, and timeliness of data on GC treatment available to health departments through case-based surveillance and/or other complementary/supplemental sources:
 - What proportion of reported cases have complete information on the treatment provided or administered, including treatment name, dosage, and date of treatment?

- Are there significant differences by patient characteristics, provider type or region between cases with known versus unknown treatment?
- To what extent do those differences affect the program’s ability to understand overall GC treatment practices or to identify areas, patient groups or providers to target with quality improvement initiatives?
- How quickly are the data on GC treatment made available for analysis, monitoring and feedback to providers/facilities potentially using treatment regimens that are not recommended?
- Based on local information and needs, how frequently should information be collected, analyzed and incorporated into program planning?
- Consider assessing GC treatment practices using a random sample of GC cases, if obtaining data on all reported GC cases is not feasible
 - If most cases are not reported with treatment information, random sampling may be a viable alternative for reliably estimating treatment patterns
 - Programs must think carefully through this process to ensure their sample is large enough, and with acceptable follow-up completion rates to be useful to prioritizing and targeting follow up efforts
 - Programs should refer to **TA Notes #2b** to better understand the steps for selecting a random sample of GC cases
 - Programs should continue to work to improve routine reporting of GC treatment, to the extent feasible in their jurisdiction. Can reporting forms be improved, or reporting procedures made easier? Do reporting forms need to be changed to better capture use of dual therapy specifically for GC? Can cases reported only through laboratory reporting be supplemented by basic provider reporting to capture treatment?
- Monitor the use of unexpected GC treatments such as higher-than-recommended ceftriaxone dosages or frequent use of gentamicin/azithromycin, as potential indicator of resistant infection

Preparing for antibiotic resistant gonorrhea (AR GC)

- GC TX assurance work will take on additional urgency if/when AR GC emerges in the U.S.
- Develop outbreak response plans for AR GC
- Ensure that GC TX-related data and systems are adequate for responding to that

Provide education and TA to providers who prescribe non-recommended treatment for GC

- Using best practices in health communication, create standard GC treatment response document(s), to be used with individual providers or organizations that demonstrate patterns of non-recommended treatment
- Consider automated, routine methods to follow up with individual providers reporting non-recommended treatment, for example through FAX-back mechanisms or other electronic messaging
- Assess the amount of time staff spend on GC treatment follow up, and the amount of provider contact that results from that effort, to help inform the value of this activity and identify ways to increase efficiency
- Contact the National Network of STD Clinical Prevention Training Centers or other clinical training resources to assist with providing education and TA to providers and organizations with relatively high use of non-recommended treatment. More intensive TA may be warranted in some cases and could be offered by clinical training centers



These strategies are different from those related to health promotion to the broader provider community (see TA Notes #13/14). Here, the idea is to conduct more targeted follow-up on use of non-recommended treatment. General, broad-based education about recommended GC treatment therapy, or about any new guidelines or notices, would be activities described under the work plan for Health Promotion, not for this strategy.

Other resources

- CDC's webpage on GC treatment: <https://www.cdc.gov/std/gonorrhea/treatment.htm>
- STD Treatment Guidelines: <https://www.cdc.gov/std/tg2015/default.htm>
- National Network of Prevention Training Centers (NNPTC): <http://www.nnptc.org>
- STD Clinical Consultation Network: <https://www.stdccn.org/>
- National STD Curriculum: <https://www.std.uw.edu/>

For more information or feedback on this document, contact your DSTDP Prevention Specialist or email STD_PCHD@cdc.gov. CDC's Division of STD Prevention, Program Development and Quality Improvement Branch, developed this document for recipients of PS19-1901 STD PCHD to provide additional clarification of strategies outlined in that NOFO and to support program implementation. The content here does not represent additional NOFO requirements nor official CDC recommendations. Issue date: April 2019